

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF CLAIMS:

1.(original) A control method for the modulation of the torque of piston combustion engine that has a compression chamber (6) of variable volume and operable inlet valves (3), characterized in that the torque requested for a predetermined operative condition is obtained through a selection of the volume of the compression chamber (6) combined with a selection of the time of opening and the time of closure of the inlet valves (3) combined with a selection of the frequency with which power strokes are performed.

2.(previously presented) A control method according to claim 1, characterized in that

- at maximum load, the maximum compression chamber volume is applied,
- upon reduced load, the compression chamber volume is reduced and the closure of the inlet valves (3) is performed earlier, and
- upon a further reduction of the load, the selection of the frequency of power strokes is performed.

3.(previously presented) A control method according to claim 1, characterized in that the selection of the frequency of power strokes is performed from idling up to 50% of maximum load.

4.(previously presented) A control method according to claim 1, characterized in that the outlet valves are operable and that the volume of the compression chamber (6) is selected in combination

with a selection of the times for opening and closure of the inlet valves (3) as well as the outlet valves (4) and in combination with the selection of the frequency by which the power strokes are performed.

5.(previously presented) A control method according to claim 1, characterized in that the engine has a plurality of cylinders (1) and that a different frequency of power strokes are chosen for different cylinders (1).

6.(previously presented) A control method according to claim 1, characterized in that the power strokes are performed with early closure of the inlet valves (3).

7.(previously presented) A control method according to claim 4, characterized in that the power strokes are performed with delayed opening of the outlet valves (4).

8.(previously presented) A control method according to claim 1, characterized in that the volume of the compression chamber (6) is controlled to be 20%-80% of the maximum volume thereof as the frequency of power strokes is selected.

9.(previously presented) A control method according to claim 1, characterized in that the volume of the compression chamber (6) is 30%-50% of the maximum volume thereof as the frequency of power strokes is selected.

10.(previously presented) A control method according to claim 1, characterized in that, at each power stroke, upon a predetermined number of revolutions per minute, which is independent of the torque, generally equal masses of air and fuel, and generally the

same proportion of air and fuel is ignited as in the other power strokes.

11. (previously presented) A control method according to claim 4, characterized in that 2-stroke cycles or 4-stroke cycles are selected upon a bases of the required torque, and that the power strokes are performed in 2-stroke cycles as well as 4-stroke cycles.

12. (previously presented) A control method according to claim 1, characterized in that comprises a control system (8) with a computer program that, by signal control upon basis of a torque request from driver, selects frequency of power strokes, valve times, lifting of the valve, the volume of the compression chamber (6) and operation with 2-stroke cycles or 4-stroke cycles.

13. (new) A control method for modulation of torque of a piston combustion engine that has a compression chamber of variable volume and operable inlet valves, wherein torque requested for a predetermined operative condition is obtained through a selection of a volume of a compression chamber combined with a selection of the time of opening and the time of closure of the inlet valves combined with a selection of the frequency with which power strokes are performed, and wherein

- at maximum load, the maximum compression chamber volume is applied,
- upon reduced load, the compression chamber volume is reduced and the closure of the inlet valves is performed earlier, and

- upon a further reduction of the load, the selection of the frequency of power strokes is performed.

14. (new) A control method according to patent claim 13, wherein the selection of the frequency of power strokes is performed from idling up to 50% of maximum load.

15. (new) A control method according to claim 13, wherein the outlet valves are operable and that the volume of the compression chamber is selected in combination with a selection of the times for opening and closure of the inlet valves as well as the outlet valves and in combination with the selection of the frequency by which the power strokes are performed.

16. (new) A control method according to claim 13, wherein the engine has a plurality of cylinders and that a different frequency of power strokes are chosen for different cylinders.

17. (new) A control method according to claim 13, wherein the power strokes are performed with early closure of the inlet valves.

18. (new) A control method according to claim 15, wherein the power strokes are performed with delayed opening of the outlet valves.

19. (new) A control method according to claims 13, wherein the volume of the compression chamber is controlled to be 20% - 80% of the maximum volume thereof as the frequency of power strokes is selected.

20. (new) The control method according to claim 13, wherein the volume of the compression chamber is 30% - 50% of the maximum volume thereof as the frequency of power strokes is selected.

21. (new) The control method according to claim 13, wherein, at each power stroke, upon a predetermined number of revolutions per minute, which is independent of the torque, generally equal masses of air and fuel, and generally the same proportion of air and fuel is ignited as in the other power strokes.

22. (new) The control method according to claim 15, wherein 2-stroke cycles or 4-stroke cycles are selected upon a bases of the required torque, and the power strokes are performed in 2-stroke cycles as well as 4-stroke cycles.

23. (new) The control method according to claim 13, comprising a control system with a computer program that, by signal control upon basis of a torque request from driver, selects frequency of power strokes, valve times, lifting of the valve, the volume of

the compression chamber and operation with 2-stroke cycles or 4-stroke cycles.